California Regional Water Quality Control Board

Central Valley Region

Robert Schneider, Chair

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ITEMS TO BE INCLUDED IN A SITE ASSESSMENT REPORT

The outline below is a minimum requirement for items to be included and discussed in the text of all site assessment reports submitted to the Board. Other supporting data to be included in the report, either within the text of the report or in appendices, are italicized at the end of each section. All reports must be signed by a registered geologist, certified engineering geologist, or civil engineer registered or certified by the State of California. Other pertinent information specific to each individual investigation also should be included.

I. INTRODUCTION

Alan C. Lloyd, Ph.D.

Agency Secretary

Summary of past investigations
Purpose of the recent investigation
Scope of the recent investigation
Time period in which the recent investigation was carried out

II. SUMMARY

Number of wells drilled Results of soil and water analyses Ground water flow direction and gradient Possible source determination

III. FIELD INVESTIGATION

Well Construction

Number and depth of wells drilled

Date(s) wells drilled

Description of drilling and construction

Approximate locations relative to facility site(s)

Supporting Data:

A well construction diagram for each well should be included in the report which shows the following details:

Total depth drilled

Depth of open hole (same as total depth drilled if no caving occurs)

Footage of hole collapsed

Length of slotted casing installed

Depth of bottom of casing

Depth to top of sand pack

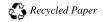
Thickness of sand pack

Depth to top of bentonite seal

Thickness of bentonite seal

Thickness of concrete grout

California Environmental Protection Agency



Boring diameter

Casing diameter

Casing material

Size of perforations

Number of bags of sand

Well elevation at top of casing

Depth to ground water

Date of water level measurement

Monitoring well number

Date drilled

Location

Well Development

Date(s) of development of each well

Method of development

Volume of water purged from well

How well development completion was determined

Method of effluent disposal

Supporting Data:

Field notes from well development should be included in report.

Water Sampling

Date(s) of sampling

How well was purged

How many well volumes purged

Levels of temperature, EC, and pH at stabilization

Sample collection, handling, and preservation methods

Sample identification

Analytical methods used

Soil Sampling

Date(s) of sampling

Sample collection, handling, and preservation method

Sample identification

Analytical methods used

IV. FINDINGS OF THE INVESTIGATION

Lithology

Types of sediments encountered

Presence, location, and lateral continuity of any significant sand, silt,

or clay layers

Any visual signs of contamination

Supporting Data:

Well logs geologic cross-sections should be included in the report.

Analytical Results of Soil and Ground Water Sampling Analytical results of each monitoring well should be summarized

Supporting Data:

Laboratory analytical sheets Chain-of-custody forms

Water Levels

Static water levels measured when well drilled Date(s) of water level measurements
Water levels determined prior to sampling

Supporting Data:

Dates of water level measurement, depths to ground water, and ground water elevations should be tabulated and included in the report.

Ground Water Gradient and Flow Direction

Ground water gradient and flow direction determined by the investigation should be discussed and compared to the regional gradient and flow direction.

Supporting Data:

A ground water contour map, drawn to scale, should be provided which shows each well, its ground water elevation, and lines of equal ground water elevation. Ground water gradient and flow direction should be shown on the map. The calculation of the gradient should be included.

V. RESULTS OF QA/QC

QA/QC procedures QC sample identification Field blank analyses Comparison of duplicate sample results

VI. CONCLUSIONS AND RECOMMENDATIONS

Evaluate any contamination found;

Compare to background levels and appropriate screening levels;

Identify any suspected source of contamination;

Recommend any further investigative needs based on data gaps; interim remedial measures; public participation;